

Top-Loading Aqueous Parts Washer

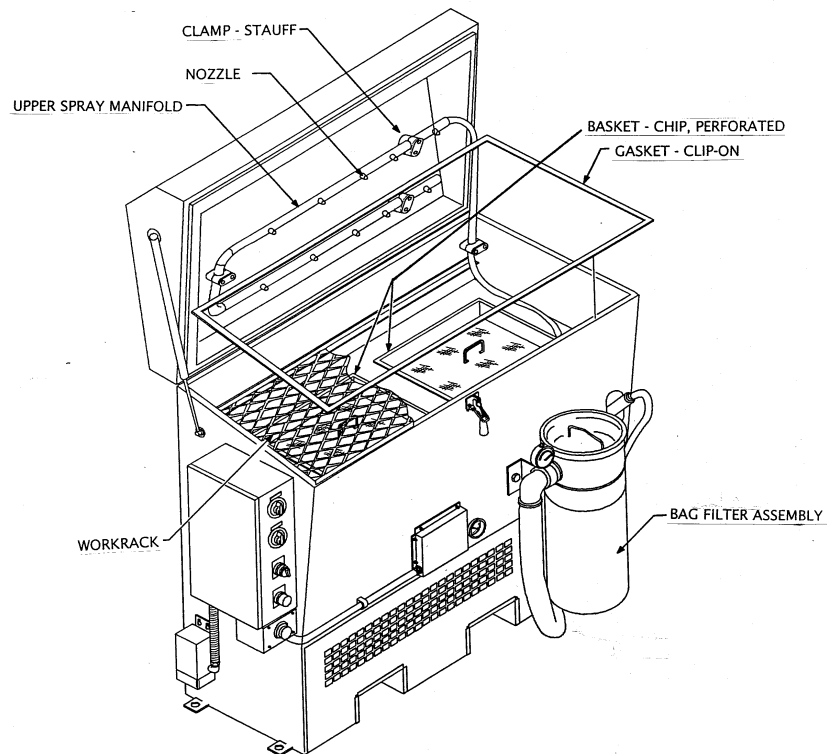


The Top Loading Aqueous Parts Washer automatically cleans dirty, oily, and greasy parts by spraying them with a heated, aqueous-based cleaning solution. Nozzles located above and below the work rack ensure all around cleaning. The force of the spray, combined with the heat and chemical action of the cleaning solution, removes contaminants within minutes.

The Washer is designed for easy installation aboard ship. It has a modular design and each module fits through a 26" by 66" standard shipboard hatch.

The detergent used contains a rust inhibitor and defoamer in its chemistry. Washer maintenance directs that the solution be monitored by performing a weekly titration. With regular, but small adjustments to the cleaning solution concentration, the solution can be used for up to six months. The unit has a built in oil skimming system and in-line filter to extend the effectiveness of the solution.

These Parts Washers have been successfully evaluated on Navy ships and are being procured for U.S. Navy ships via the Pollution Prevention Afloat Program beginning in FY 99. Fleetwide implementation of the Washers has begun and will continue through FY 05.



Equipment Characteristics

Equipment Envelope:

Weight: Dry: 800 lbs
 Wet: 1100 lbs

Footprint: Height: 48 inches
 Width: 62 inches
 Depth: 33 inches

Maintenance and Height: 64 inches
Operational Footprint: Width: 78 inches
 Depth: 57 inches

Ship's Services Required

Electrical Power Supply: 460 volts; 3 phase; 60 Hz
 Full Load Amps: 18

Potable Water: Makeup water source located in
 vicinity

Inserted Part Weight: Weight: 300 lbs

The Top Loading Aqueous Parts Washer is Easy to Operate

- Operator pre-heats the tank cleaning solution by turning the heat knob located on the front of the machine. The machine comes to temperature in less than one hour. The minimum operating temperature to ensure proper operation of the equipment is 140° F; the optimal temperature is 155° F.
- Operator performs a daily equipment check prior to operation, including checking the differential pressure through the in-line filter, cleaning debris from the chip baskets, and checking the integrity of the hoses and clamps on the unit.
- Operator puts dirty, oily, or greasy component onto the rubber-coated metal work rack. The rack can hold parts up to 300 Lbs (distributed across the tray) and accommodate some ship filters, GSE equipment engine components, and some components previously cleaned using P-D-680.
- The operator closes the unit and sets the wash dial on the front of the machine to run for approximately 15 minutes.
- At the end of the wash cycle, the operator can safely remove the cleaned item. Pieces can also be cleaned manually using an attached brush.



Top Loading Aqueous Parts Washer Key Features

- Unit automatically cleans dirty, oily, and greasy components using heated water jet spray with an aqueous-based cleaning solution.
- Unit is modular and can be readily disassembled for easy shipboard installation.
- Unit has many features to promote safe and successful use onboard ship for many years.
- Unit is easy to use and maintain, and requires minimal training.
- Unit improves health and safety for crew by reducing solvent dip tank use.

Personnel and Training Requirements

- The Washer decreases manhours by reducing the time required to clean components by hand using PD-680 or other cleaning agents.
- Equipment is commonly located in the filter cleaning shop, main spaces, or where the crew has easy access to it.
- Parts Washer operators are required to wear PPE in accordance with MSDS requirements, as well as gloves, and face shield.

ILS Support

- A Technical Manual to operate, maintain, troubleshoot, and repair the Washer is provided.
NAVSEA TM SL172-AB-LSS-010
- Repair parts are readily available.
- Logistics support has been provided.
 - 41A990007
 - 0099-LL-H54-0448

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